AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1. (Currently amended) A system to coordinate at least one of communications, collaboration, and coordination between parties, comprising:

a user state identifier that determines a user's state from at least one context information source, the user state identifier generates an indication of whether a user state change has occurred from the at least one context information source;

a data log that stores information associated with the at least one context information source at about the time of the user state change to accumulate statistics relating to at least one of an availability and an unavailability of the user; and

an e-mail service that generates dynamically customized automated responses to one or more messages based on a user's availability and a prediction model that predicts, based on the communication, collaboration and coordination, future availability and unavailability of the user, and an amount of time until the user returns to the communication, collaboration and coordination.

2. (Previously presented) The system of claim 1, further comprising a forecaster constructed from the accumulated statistics that enables a determination of the user's at least one of availability and unavailability.

3. (Previously Presented) The system of claim 2, the forecaster employs a probability distribution over a time until the user returns to drive an application wherein the user can review information that has arrived.

4. (Previously presented) The system of claim 3, further comprising a notification system that reasons about an expected cost of delayed review of information so as to guide decisions about alerting the user before the user can observe the information.

5. (Cancelled).

6. (Original) The system of claim 4, further comprising a display that is accessed by other users, systems, and applications regarding the at least one of the user's availability and unavailability.

7. (Previously Presented) The system of claim 4, the forecaster conditions probabilities on different types of appointments that are observed on a calendar and shares information based on at least one of the nature and privileges of the person inspecting the calendar, the information is based on an inferred urgency of a communication.

8-11. (Cancelled).

12. (Previously Presented) The system of claim 2, the forecaster is constructed to determine probabilities associated with the users return in an "x" amount of time, given that the user has been away for a "y" amount of time, based upon observed evidence of the user's context.

13-14. (Cancelled).

15. (Previously Presented) The system of claim 2, the forecaster generates prediction information regarding at least one of the user's likely return and the user's current availability.

16. (Cancelled).

17. (Cancelled).

18-19. (Cancelled).

20. (Original) The system of claim 15, further comprising a priorities service wherein automated responses are generated as a result of an urgency threshold and the prediction information.

21. (Previously Presented) The system of claim 20, the priorities service further comprises a user configuration interface that enables at least one of sending an automated response, configuring an urgency threshold, and configuring the amount of time the user is unavailable.

22. (Cancelled).

23. (Previously presented) The system of claim 15, further comprising a voice mail service wherein automated acoustical responses are generated with associated prediction information that attempt to reschedule a call based upon considerations of the user's availability.

24. (Cancelled).

25. (Original) The system of claim 15, further comprising a scheduling system, wherein one or more user calendars are automatically updated to reflect the associated user's availability.

26. (Cancelled).

27. (Previously presented) The system of claim 15, further comprising an automated maintenance service wherein a maintenance operation is performed at times determined by the prediction information scheduled from at least one of a resident computer system and a remote computer system and wherein the maintenance service provides at least one of drive organization, drive de-fragmentation, and virus checking.

28-30. (Cancelled).

31. (Previously Presented) The system of claim 1, the user state identifier employs at least one of a rules-based determination, a statistical determination, and a decision-theoretic determination.

32-33. (Cancelled).

34. (Original) The system of claim 2, the forecaster is constructed from at least one of probabilistic classifiers, support vector machines, Bayesian networks, Bayesian dependency networks, and decision trees.

35. (Previously Presented) The system of claim 34, the forecaster generates forecasts as probability distributions that relate to at least one of the amount of time until a user returns to a situation and to a pattern of communication action based on multiple pieces of evidence.

36. (Previously presented) The system of claim 34, the forecaster including at least one of how long the user has already been gone, has not had access to a channel and other evidence including at least one of a time of day, information on a calendar, location of a current or last appointment, location of a next appointment, a type of day, the type of day including at least one of a weekend, holiday, weekday, and current status of the user.

37. (Cancelled).

38. (Previously Presented) The system of claim 2, the forecaster employed to function in at least one of an automatic, collaborative, synchronous and asynchronous manner in conjunction with at least one of a contactor and the contactor and a contactee, to tentatively reschedule a communication or collaboration of one or more forms based on inferences relating to the users availability.

39-46. (Cancelled).

47. (Currently amended) A communications system, comprising:

means for determining one or more user states;

means for detecting a change of the one or more user states;

means for storing user context information at about the time of detecting the change of the one or more user states;

means for building a prediction model from the stored context information; ~~and~~

means for utilizing the prediction model to forecast availability and unavailability of a user and an amount of time until the user returns, the forecast of availability and unavailability based on a plurality of communications, and the forecast of the amount of time based on how long the user has already been absent; and

means for generating an automated message response based upon forecasting information derived from the prediction model, the automated message response includes content dynamically transformed based at least in part on the forecasting information.

48-80. (Cancelled).